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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,266	12/16/2003	Lee Tice	SYS-P-1280 (8364-90590)	5858
7590 02/06/2008 Patent Services Group Honeywell International, Inc. 101 Columbia Raod P. O. Box 2245 Morristown, NJ 07962			EXAMINER NGUYEN, VAN KIM T	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 02/06/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/737,266	Applicant(s) TICE ET AL.	
	Examiner Van Kim T. Nguyen	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to communications filed on July 20, 2007 and November 9, 2007.

Claims 1-26 are pending in the application.

Response to Arguments

2. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-10 and 15-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "an expected signal" in line 7. It is not clear whether "an expected signal" is the "expected synchronizing wireless signal" as recited in line 5 or the "wireless signal from at least one of a plurality of remote electrical units" as recited in line 6.

Claim 1 also recites the limitation "the plurality" in line 8. It is not clear whether "the plurality" refers to the "plurality of remote electrical units" as disclosed in line 6.

Claims 2-9 depend on claim 1, thus rejected under the same basis.

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Claim 15 recites the limitation “the wireless synchronization signal” in line 4. There is insufficient antecedent basis for this limitation in the claim since “a wireless synchronization signal” has not been introduced prior to this.

Claim 15 also recites the limitation “the synchronization signal” in line 5. It is not clear whether “the synchronization signal” refers to “a synchronization signal” as disclosed in line 3 or “the wireless synchronization signal” as disclosed in line 4.

Claim 15 also recites the limitation “the energy” in line 5. There is insufficient antecedent basis for limitation in the claim.

Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-6, 8, 15-19, 21, 24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by van Bokhorst et al (US 6,192,230), hereinafter van Bokhorst.

Regarding claim 1, as shown in Figures 8-12, van Bokhorst et al discloses an electrical unit (220) comprising:

a wireless communications port (220, 230);

control circuitry (244) coupled to the port, the control circuitry having, at least, an inactive mode interrupted by a periodic limited duration active mode, including circuitry to monitor the port for receipt of an expected synchronizing wireless signal and receipt of a wireless signal from at least one of a plurality of remote electrical units, during the active mode, and, responsive thereto to determine if a received signal is an expected signal, the control

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circuitry remains in the active mode unit no unit in the plurality is transmitting a wireless signal (e.g., all stations 220 can communicate directly with one another and be either in an awake state or doze state, dependent on the state of switch 244. When a station 220 starts participation in network 210, it is controlled to be in the awake state until it receives a message. If the message is a PSYNC message, this means that there is no message waiting for it, and the station returns to the doze state).

Regarding claim 2, van Bokhorst also discloses at least a radio frequency receiver coupled between the port and the control circuitry (e.g., wireless transceiver coupled to antenna 222, Figure 9, col. 7: lines 26-28).

Regarding claim 3, van Bokhorst also discloses additional circuits (234, 236, 246, 247, 248, 250, 253 and 254) to evaluate the received synchronizing signal for the presence of a signal expected indicium, and, responsive thereto, to determine if an additional message is expected (e.g., if the station receives one or more PTIM messages, this means one or more messages are waiting for it, the station then stays in the awake state until it receives the indicated messages from the issuers of all the received PTIM messages; col. 9: lines 11-19).

Regarding claim 4, van Bokhorst et al also discloses circuitry (234, 236, 246, 247, 248, 250, 253 and 254) to extend the active mode and to acquire and respond to any expected additional message (e.g., when the receipt of data messages extends over several PSYNC interval, the doze time is restarted after each PSYNC message, but does not return the station to

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the doze state; col. 9: lines 19-23).

Regarding claim 5, van Bokhorst-Lucas also discloses the control circuitry comprises, at least in part, a processor (234) and executable instructions (e.g., mobile station functions as a hand held data processing device, thus it is obvious it comprises executable instructions; van Bokhorst, col. 7: lines 30-34).

Regarding claim 6, van Bokhorst also discloses timer circuitry (246), coupled to the processor, for initiating the periodic, limited duration active mode (col. 8: lines 36-45).

Regarding claims 7-8, van Bokhorst also discloses includes executable instructions for transmitting data with a different protocol than the received synchronizing signal (e.g., PSYNC messages are broadcast messages, while short messages can be directly transmitted to the station; col. 7: line 62-64 and col. 8: lines 53-55).

Regarding claim 11, van Bokhorst also discloses a method comprising:

transmitting a wireless synchronizing signal on a periodic basis (col. 7: line 57 – col. 8: line 15);

entering an active mode to receive and evaluate the synchronizing signal, and responsive thereto, entering one of a data receiving or a data transmitting mode with the data having a different protocol than the synchronizing signal (e.g., PSYNC messages are broadcast messages, while short messages can be directly transmitted to the station; col. 7: line 62-64 and col. 8: lines

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53-55); and

remaining in the active mode for a period of time at least until no further data is received (if there is no message waiting, the station returns to the doze state; if the station receives one or more PTIM messages, it stays in the awake state after the PSYNC messages is received until it receives the indicated messages from the issuers of all the received PTIM messages; col. 9: lines 8-23).

Regarding claim 15, as shown in Figures 8-12, van Bokhorst also discloses a communication system (210) comprising at least three devices that can wirelessly transmit and receive signals:

a first device wirelessly transmitting a synchronization signal (e.g., station 220-1 assumes the role of the master station and commences to transmit PSYNC messages at regular interval; col. 7: lines 59-62);

at least a second device receiving the wireless synchronization signal, the second device synchronizes functions to the synchronization signal such that the energy consumption of the second device is reduced for a period of time between synchronization signals (the reception of a PSYNC message at stations 220 other than the master station, i.e., the second device, triggers the doze timer 246 to initiate a doze interval of low power operation; col. 8: lines 16-19); and

at least a third device receiving the wireless synchronization signal, the third device synchronizes functions to the synchronization signal such that the energy consumption of the third device is reduced for a period of time between synchronization signals, where the second device is capable of receiving a wireless signal from the third device and the third device is

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capable of receiving a wireless signal from the second device, and where the second device and the third device enter an active mode upon receipt of the synchronization signal and remain in the active mode at least for a period of time during which a wireless signal is received from at least the third device or at least the second device (PSYNC messages are transmitted to all stations 220, i.e., the third device; and the reception of a PSYNC message at the third device triggers the doze timer 246 to initiate a doze interval of low power operation (col. 8: lines 16-19). All stations 220, i.e., the second and third device, can communicate directly with one another (col. 7: lines 20-22). If station 220 receives one or more PTIM messages, it will stay in the awake state after the PSYNC message is received until it receives the indicated messages from the issuers of all the received PTIM messages (col. 9: lines 11-23).

Regarding claim 16, van Bokhorst also discloses the second device or the third device includes a battery 240 (col. 7: lines 34-37).

Regarding claim 17, van Bokhorst also discloses the synchronization signal is transmitted periodically with a predetermined timing (col. 8: lines 5-15).

Regarding claim 18, van Bokhorst also discloses the synchronization signal includes at least one of RF frequencies, optical frequencies or sonic frequencies (e.g., since wireless transceiver 230 is coupled to antenna 222, it is inherent the synchronization signal received at mobile station 220 includes at least one of RF frequencies; Figures 8-9).

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Regarding claims 19, van Bokhorst also discloses the synchronizing function includes transmitting a signal representative of a detector state (e.g., TIM; col. 4: line 16 - col. 7: line 14).

Regarding claim 21, van Bokhorst also discloses the first device receives the transmitted signal (Figures 8-9).

Regarding claim 24, van Bokhorst including a plurality of devices (220-1 to 220-4) receiving the wireless synchronization signal (Figure 8).

Regarding claim 26, van Bokhorst also discloses a communication system comprising a plurality of wireless units where each wireless unit in the plurality receives a wireless synchronization signal, each wireless unit is capable of receiving a wireless signal transmitted from a second wireless unit within the plurality, and energy consumption of each wireless unit is reduced for a period of time between no longer receiving a wireless signal from the second wireless unit and receiving the wireless synchronization signal (Figure 8, a plurality of mobile wireless stations 220, situated within a coverage area such that all stations 220 can communicate directly with one another. The reception of a PSYNC message at stations 220 other than the master station, i.e., the second device, triggers the doze timer 246 to initiate a doze interval of low power operation; col. 8: lines 16-19).

Claim Rejections - 35 USC § 103

7. Claims 9-10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Bokhorst as applied to claims 7 and 11 above, and further in view of O'Scolai (US 7,050,409), hereinafter O'Scolai.

Regarding claims 9-10 and 12, van Bokhorst fails to disclose executable instructions that sense and decode multiple data signals received from multiple sources substantially simultaneously.

O'Scolai teaches executable instructions that sense and decode multiple data signals received from multiple sources substantially simultaneously (col. 5: line 34 – col. 6: line 64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply O'Scolai's teaching to van Bokhorst's system, motivated by the desire of enhancing the quality of transmission and better utilization of network resources.

Regarding claim 13, van Bokhorst-O'Scolai also discloses includes minimizing energy requirements at a plurality of synchronizing signal receiving locations between such signals (van Bokhorst, col. 8: line 5 – col. 9: line 64).

8. Claims 20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Bokhorst, as applied to claims 18 and 15 above, in view of O'Scolai.

Regarding claim 20, van Bokhorst discloses substantially all the limitations, except the detector state comprises at least one of an alarm, trouble, voltage, input, or sensor condition.

O'Scolai teaches a system and method for transmitting frequency variation,

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synchronization at the receiver, and provides a virtual signaling channel which may be used for system alarm and status (see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply O'Scolai's teaching to van Bokhorst's system, motivated by the desire of enhancing the quality of transmission and better utilization of network resources.

Regarding claim 22, van Bokhorst-O'Scolai also discloses the transmitting of a signal includes at least in part a frequency that is the same as the synchronization frequency (O'Scolai; col. 3: line 26 – col. 4: line 46).

Regarding claim 23, van Bokhorst-O'Scolai also discloses the synchronization signal includes variable frequencies (O'Scolai; col. 3: line 26 – col. 4: line 46).

9. Claims 14 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Bokhorst, as applied to claims 11 and 24 above, in view of Lucas et al (US 2003/0185158), hereinafter Lucas.

van Bokhorst discloses substantially all the claimed limitations, except members of the plurality of devices each includes circuitry to transmit data signals at different offsets from the synchronizing signal in response to at least one of, a substantially random number, or, a unique device identifier.

Lucas teaches members of the plurality of devices each includes circuitry to transmit data signals at different offsets from the synchronizing signal in response to at least one of, a

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substantially random number, or, a unique device identifier (para 0016-0018).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Lucas' method of correcting frequency in van Bokhorst's system, motivated by the need of improving success in packets detection and acquisition.

Conclusion

10. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Kim T. Nguyen whose telephone number is 571-272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

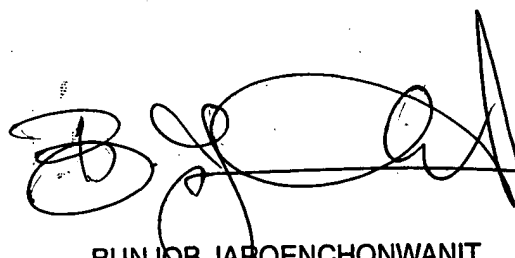
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen
Examiner
Art Unit 2151

vkn



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

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